

### THREE DIMENSIONAL FORMAT BIOCHIPS

#### Abstract of the Disclosure

A biochip is formed with a plurality of optically clear hydrogel cells attached to the top surface of a solid substrate in the form of an array. Each of the cells is formed of a hydrogel of polyethylene glycol, polypropylene glycol or a copolymer thereof having reactive isocyanate groups. Binding entities are immobilized in these cells, which  
5 entities are effective to selectively hybridize to or sequester a target biomolecule. Different binding entities are immobilized in different cells in an array to create a biochip that can be used to assay for a number of target biomolecules.